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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

Application Number: 09/691,347

Filing Date: 10/18/2000

Appellant(s): REEVES, DOUGLAS S.

SEP 11 2007

Technology Center 2100

John R. Witcher III
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/6/2007 appealing from the Office action
mailed 11/16/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|-----------|-----------------|---------|
| 6,661,806 | Eriksson et al | 12-2003 |
| 6,058,113 | Chang, Young-fu | 5-2000 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 - 14, 20 - 29, 33 - 36 are pending. Independent claims are 1, 5, 9, 20, 24, 27, 33. These rejections are set forth in prior Office Action, Paper No. 09691347\20051111 and reproduced for convenience.

Claim Rejections - 35 USC § 103

1. Claims 1 - 14, 20 - 29, 33 - 36 are rejected under 35 U.S.C.103(a) as being unpatentable over Eriksson et al. (U.S. Patent No. 6,661,806) in view of Chang et al. (US Patent No. 6,058,113).

Regarding Claims 1 (Currently Amended), 20 (Currently Amended), 33 (Currently Amended), Eriksson discloses a method, communication server and software of authorizing communications comprising:

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a) receiving a request for authorization to establish a communication with a destination terminal from an origination terminal; (see Eriksson col. 3, lines 3-6: *When a user requires communications between two nodes, a resource request, including authentication, is generated and transmitted.*)

b) generating authorization indicia for the communication, the authorization indicia configured to enable reservation of resources for the communication; (see Eriksson col. 3, lines 6-10: *The specified request parameters required to complete the communications between the origination and destination terminals are within the request. Parameters: bandwidth, traffic class, source address, destination address.*)

Eriksson discloses wherein the at least one of the originating and destination terminals receiving the authorization indicia will subsequently send the authorization indicia to at least one network element to reserve resources for at least a portion of the communication. (see Eriksson col. 3, lines 31-35: *When the required reservation parameters are authenticated and if required resources are available, the resources are reserved for the communications.*) Eriksson discloses the capability to send resource reservation information upstream to a sender (i.e. originating) network node.(see Eriksson col. 3, lines 29-31: any network node (i.e. destination) can request resource reservation; col. 4, lines 19-24: ticket message (i.e. resource reservation) sent to sending network node) In addition, Chang discloses:

c) initially sending the authorization indicia to at least one of the originating and destination terminals to facilitate reservation of resources for the communication (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to efficiently maintain correct resource reservation parameters within a network environment. (see Chang col. 2, lines 8-12: “*... efficiently maintaining correct resource reservation along a multicast path even when network routing is changed at the switching nodes and when other state changes in the network occur ...*”)

Regarding Claims 2, 21, 34, Eriksson discloses wherein the originating and destination terminals receiving the authorization indicia will send the authorization to corresponding network elements forming part of the communication path to reserve resources for portions of the communication. (see Eriksson col. 3, lines 28-30: *Each node in the communications path performs resource reservation after authentication of requests.*) Eriksson does not disclose the capability to send resource reservation information upstream to a sender (i.e. originating) network node. However, Chang discloses the method of claims 1, 20, 33 wherein the sending step comprises sending the

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authorization indicia to the originating and destination terminals to facilitate reservation of resources for the communication. (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to efficiently maintain correct resource reservation parameters within a network environment. (see Chang col. 2, lines 8-12)

Regarding Claims 3, 22, 35, Eriksson discloses the method of claims 1, 20, 33 further comprising verifying the user of the originating terminal is capable of receiving services providing the communication. (*see Eriksson col. 4, lines 32-36: A user's request is authenticated against current policy rules to determine if the particular user is authorized to reserve the requested resources.*)

Regarding Claims 4, 23, 36 Eriksson discloses the method of claims 1, 20, 33 wherein the step of generating authorization indicia comprises authenticating the authorization indicia for use by the at least one network element. (*see Eriksson col. 4, lines 32-36: Authentication is verified against the current policy rules for users and nodes.*)

Regarding Claim 5 (Currently Amended), Eriksson discloses a method of authorizing communications comprising:

- b) reserving resources for at least a portion of the communication based on the authorization indicia. (see Eriksson col. 3, lines 31-35: *Resources are reserved based on communication requirements.*)

Eriksson discloses receiving a request from a destination terminal to reserve resources for a communication between an originating terminal and the destination terminal, (see Eriksson col. 2, lines 59-65) and configured to enable reservation of resources for the communication; (see Eriksson col. 1, lines 48-52; *The user's contract with the service (network) provider is the basis for the authentication of resource reservation. When a user requires communications, a resource request is generated and transmitted.*) Eriksson discloses the capability for a sending node to receive resource reservation information.(see Eriksson col. 3, lines 29-31: any network node (i.e. originating, destination) can request resource reservation; col. 4, lines 19-24: ticket message (i.e. resource reservation) sent to sending network node) In addition, Chang discloses:

- a) the capability to send reservation information upstream to a sender (i.e. originating) terminal wherein the request associated with authorization indicia provided to the originating terminal by a service provider. (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to optimize and efficiently maintain correct resource reservation parameters within a network environment. (see Chang col. 2, lines 8-12)

Regarding Claim 6 (Currently Amended), Eriksson discloses the method of claim 5 wherein the reserving step comprises reserving resources for the communication at a second network element associated with the destination terminal using the request received from the destination terminal. (see Eriksson col. 3, lines 29-31: *Each node (i.e. destination) in communications path performs resource reservation after authentication is verified.*)

Regarding Claim 7, Eriksson discloses the method of claim 6 further comprising provisioning for resources for the communication over a network between the first and second network elements based on the authorization indicia. (see Eriksson col. 10, lines 42-46: *The requested resources have been reserved along the communication path from origination to destination.*)

Regarding Claim 8 (Currently Amended), Eriksson discloses the method of claim 5

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further comprising establishing a second communication from the originating terminal to the destination terminal and reserving resources for at least a portion of the second communication based on the authorization indicia. (see Eriksson col. 10, lines 42-46:

Each node along a portion or the entire communications path (i.e. first or second communications path) performs resource reservation after authentication is verified.)

Regarding Claims 9, 27, Eriksson discloses a terminal for effecting communications comprising a network interface and a control system (see Eriksson col. 10, lines 16-20: *resource management controller system*) associated with said network interface, said control system adapted to:

- a) send a request to establish a communication with a remote terminal over a network to a service provider; (see Eriksson col. 2, lines 59-65; col. 3, lines 3-6:
Quality of service and service differentiation are provided by contract between service (network) provider and user. A resource request is generated and transmitted, when a user requires communications over the network.)
- b) receive authorization indicia configured to enable reservation of resources for the communication from the communication server in response to the request to establish the communication; (see Eriksson col. 3, lines 11-13:)
- c) send a request associated with the authorization indicia to a network element to reserve resources for the communication wherein the authorization indicia is configured to enable the network element to reserve sufficient resources for at least a portion of the communication. (same as 1.c: *When the required*

*reservation parameters are authenticated and required resources are available,
the resources are reserved for the communications.)*

Regarding Claim 10, Eriksson discloses the terminal of claim 9 wherein said control system is further adapted to effect the communication over a communication path having the reserved resources with the destination terminal via the network element. (see Eriksson col. 10, lines 35-40: *A resource management control system handles all authentication and resource reservation with a network or set of subnetworks.*)

Regarding Claims 11, 29, Eriksson discloses the terminal of claim 10, 28 wherein said control system is adapted to effect a second communication over a second communication path with the destination terminal via the network element. (same as 10: *A resource management control system handles authentication and resource reservation with a network for a first or second communications path.*)

Regarding Claim 12, Eriksson discloses the terminal of claim 9 wherein said terminal is a cable terminal and said control system facilitates at least one of the group consisting of receiving or transmitting audio and video via the communication. (see Eriksson col. 3, lines 6-10: *Audio and video communications requires a consistent and dedicated amount of bandwidth along communications path during entire transmission.*
Reservation of resources specifies a bandwidth requirement for the entire transmission.)

Regarding Claim 13, Eriksson discloses the terminal of claim 9 wherein said terminal is a telephony terminal and said control system facilitates at least one of the group consisting of receiving or transmitting audio via the communication. (same as 12)

Regarding Claim 14, Eriksson discloses the terminal of claim 9 wherein said terminal is a receiver and said control system facilitates at least one of the group consisting of receiving at least one of the group consisting of audio and video via the communication. (same as 12)

Regarding Claim 24, Eriksson discloses a policy server for approving resource reservation for a router in a network, said policy server (see Eriksson col. 4, lines 32-36: *policy rule based authentication*) comprising a network interface and a control system associated with said network interface, said control system adapted to:

- a) receive a request to approve reservation of resources for a communication from a router, the request including authorization indicia configured to enable reservation of resources for the communication; (same as 2: *Each node (i.e. router, network device) in the communications path performs resource reservation after authentication of requests.*)
- b) determine whether to approve the reservation of resources for the communication based on the authorization indicia; (see Eriksson col. 3, lines 30-

- 31: *Resource reservation is performed for each node after authentication of requests)*
- c) send a response to the request to the router indicating whether the request for the reservation of resources was approved. (see Eriksson col. 3, lines 31-35: *An ACK is sent through the communications path if the reservation resource requirements are approved.*)

Regarding Claim 25, Eriksson discloses the policy server of claim 24 wherein said control system is further adapted to communicate with a service provider to confirm the reservation of resources is appropriate based on the authorization indicia. (see Eriksson col. 2, lines 59-65: *The service (network) provider's contract with the user determines whether it is appropriate to allow the reservation of resources.*)

Regarding Claim 26, Eriksson discloses the policy server of claim 24 wherein said control system is further adapted to communicate with an authentication service to confirm the authorization indicia is authentic. (see Eriksson col. 3, lines 39-45: *Digital Signature technology is used to determine authenticity and to prevent alteration of reservation information.*)

Regarding Claim 28, Eriksson discloses the computer readable medium of claim 27 comprising further instructions to effect the communication over a communication path having the reserved resources with the destination terminal via the network element.

(see Eriksson col. 4, lines 11-14: *Authenticated data packets are transmitted over the communications path from the origination to the destination (receiving) terminal.*)

(10) Response to Argument

A. Claims 1 - 14, 20 - 29, and 33 - 36 are Non Obvious Because the Combination of References is Improper.

A.1: Applicant argues that the referenced prior art does not disclose " ... *obviousness combinations are improper* ... " (see Appeal Remarks Pages 7-8)

A.2: Applicant argues that the referenced prior art does not disclose " ... *authentication indicia allow intermittent nodes along the communication path to dynamically reserve resources for a session once the session has been initiate* ... " (see Appeal Remarks Page 10, Lines 11-13)

A.3: Applicant argues that the referenced prior art does not disclose " ... *the use of authentication indicia, which is configured to "enable reservations of resources" at intermediate nodes in a communication network.* ... " (see Appeal Remarks Page 9, Lines 9-10)

A.4: Applicant argues that the referenced prior art does not disclose " ... *the receipt, generation, or use of the authentication indicia* ... " (see Appeal Remarks Page 10, Lines 23-24); " ... *the resources have already been reserved and the ticket* ... " (see Appeal Remarks Page 9, Lines 29-30)

A.5: Applicant argues that the referenced prior art does not disclose " ... *Chang did not reserving actual resources of the intermediate nodes , but instead, reserves resources*

of the communications terminals themselves ... " (see Appeal Remarks Page 11, Lines 1-2); "... Chang is focused on the resources at the respective communication terminal and is not concerned about reserving resources at the intermediate nodes ... " (see Remarks Page 11, Lines 22-24)

Examiner Response to Argument dated July 10, 2006

The Examiner's Rejection is proper given that the cited passages of Eriksson (6,661,806) and Chang (6,058,113) disclose the applicant's claimed invention.

As to Point A.1.:

The 103 referenced prior art combination of Eriksson and Chang, clearly states the advantages achieved from the referenced prior art combination (see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node), which is the motivation for the combination (see Chang col. 2, lines 8-12: "... *efficiently maintaining correct resource reservation along a multicast path even when network routing is changed at the switching nodes and when other state changes in the network occur ...*"), and is indicated by citations from the referenced prior art (It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eriksson to enable the capability to send reservation request information from a downstream network node upstream to a sender network node (i.e. originating terminal) as taught by Chang. One of ordinary skill in the art would be motivated to employ Chang in order to optimize and efficiently maintain correct resource reservation parameters within a network environment. (see Chang col.

2, lines 8-12)). The stated functions performed by the applicant's invention are well known in the art, and would be obvious functions to anyone knowledgeable in the art. The referenced prior art functional combinations are successfully combined and success is achieved. The requirements for a case of obviousness have been satisfied.

As to Point A.2.:

Applicant discloses the term "*dynamically reserve resources*" (see *Appeal Remarks Page 10, Lines 11-13*). This particular term does not appear within the claims limitations. In any event, the Eriksson (6,661,806) and Chang (6,058,113) combination discloses dynamic changes or modifications in the resources reserved for a communications path while the communication session is active. (see Chang col. 2, lines 37-41)

Resource reservation is well known to one skill in the art. The authentication indicia is merely information transmitted between network nodes with resource reservation information. As the authentication indicia is transmitted along the communications path, the resources are reserved. The Eriksson prior art discloses an equivalent function which reserves initial resources and realtime modifications along a communications path.

The Eriksson (6,661,806) prior art discloses the capability to send a request for communication (i.e. resource reservation) from a remote network node. In addition, the capability exists for the sender network node to received the ticket message (i.e. reserve resources information). (see Eriksson col. 3, lines 29-31: any network node

(i.e. destination) can request resource reservation; col. 4, lines 19-24: ticket message (i.e. resource reservation) sent to sending network node) The request is equivalent to applicant's authentication indicia.

As to Point A.3.:

The Eriksson (6,661,806) prior art discloses the capability for resource reservation from any network node along communications path. (see Eriksson col. 3, lines 29-31: any network node (i.e. origination, destination) along transmission path can reserve resources)

As to Point A.4.:

The request for the reservation and the usage of tickets is equivalent to the applicant's authentication indicia. The resource reservations can be modified as the communications session is active. (see Chang col. 2, lines 37-34)

As to Point A.5.:

The Eriksson and Chang prior art combination discloses the reservation of system resources via a request. There is no indication at all within the Chang prior art that the resources are reserved only for the endpoint communications terminals. The reservation of resources is for network nodes along the communications path, which included the intermediate network nodes. The reservation of resources for the communications path has to be reserved for the endpoints communications nodes and

the intermediate communications nodes, otherwise the communications path may not be available. (see Eriksson col. 3, lines 3-6: request; see Eriksson col. 3, lines 29-31: any network node (i.e. destination) can request resource reservation; col. 4, lines 19-24: ticket message (i.e. resource reservation) sent to sending network node; see Chang col. 7, line 66 - col. 8, line 7; col. 8, lines 45-50: resource reservation information send upstream to sender (i.e. originating) network node; col. 2, lines 37-34).

Conclusion

The referenced prior art discloses the applicant's invention essentially as claimed. Applicant's invention claims a capability for the reservation of network resources along a communications path between a source and a destination node. In addition, the destination node sends a response back to the source node (i.e. upstream node), that the resources have been reserved. In addition, applicant's invention claims the capability to modify the reserved resources during the communications session.

The referenced prior art discloses the capability to reserve resources for a communications path between a source and destination node. The referenced prior art discloses the capability to send a response from the destination node to the source node, concerning the resources reserved for the communications path. In addition, the referenced prior art discloses the capability to modify the resources reserved after the communications session is active.

This disclosure in the reference prior art is equivalent to applicant's claimed invention.

The rejection to each independent and dependent claim includes a citation from the referenced prior art that discloses the basis for the rejection. Each obviousness combination clearly indicates the claim limitation the combined reference prior art teaches. In addition, a cited passage from the referenced prior art clearly indicates the motivation for the obviousness combination. **Each obviousness combination's disclosure is equivalent to the applicant's claimed invention.** All claims in Applicant's invention have been rejected based on as anticipatory or obvious based on the referenced prior art.

In conclusion, the examiner has considered the applicant's remarks concerning the collection, processing of user profile information and the secure delivery of content based on that user profile. After an additional analysis of the applicant's invention, remarks, and a search of the available prior art, it was determined that the current set of prior art consisting of Eriksson (6,661,806) and Chang (6,058,113) disclose the applicant's invention including disclosures in Appeal Remarks dated July 10, 2006.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

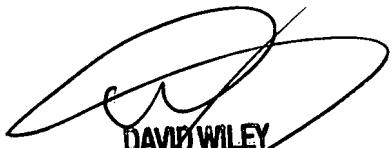
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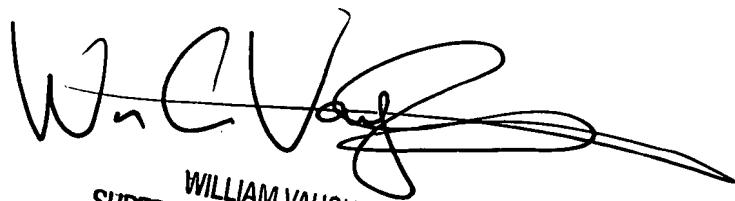
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